In the Specification:

Please amend the Paragraphs beginning at **Page 8, line 3** through **Page 10, line 24**, as follows:

In the drawings:

FIG. 1 is a prior art schematic illustration of the biosynthesis of mammalian melanin adopted from Alaluf *et al.*, 2001.

FIG. 2 is a color photograph that illustrates the stirred tank reactor (STR) for the production of lignin peroxidase by *Phanerochaete chrysosporium* immobilized on polyurethane foam.

FIG. 3 is a line drawing that illustrates LIP activity in a fermentor culture of *P. chrysosporium* as a function of culture age. *P. chrysosporium* was grown in an STR fermentor as described in Example 1 of the Examples section and LIP activity was assayed in the extracellular fluid by following the oxidation of veratryl alcohol to veratryl aldehyde as described in Examples. Error bars represent standard deviations of 3 replicate experiments.

FIG. 4 is a line drawing that illustrates the oxidation of melanin, at an initial concentration of 70.5 μg/ml, by LIP (0.48 μM) as a function of increasing concentrations of hydrogen peroxide in the presence of 1.5 mM veratryl alcohol in 50 mM tartrate buffer, at pH 3.5. Oxidation of melanin was determined by measuring its absorbance at 460 nm, at the beginning of the enzymatic reaction and after 160 seconds, and the percentages of oxidized melanin were calculated. The error bars represent standard deviations of 3 replicate experiments.

FIG. 5 is a color photograph that illustrates the effect of increasing concentrations of hydrogen peroxide on the oxidation of melanin by LIP. Degree of oxidation of melanin is visualized by decrease in color intensity in comparison to the enzymatic reaction without the inclusion of hydrogen peroxide (0 μM). Numbers below the picture indicate concentrations of H_2O_2 expressed in μM.

FIG. 6 is a line drawing that illustrates the degree of oxidation of different concentrations of melanin by LIP (0.48 μM) in 50 mM tartarate buffer at pH 3.5 in the presence of veratryl alcohol (1.5 mM) and hydrogen peroxide (600 μM). Error bars represent standard deviations of 3 replicate experiments.

FIG. 7 is a line drawing that illustrates the degree of oxidation of melanin as a function of LIP concentrations. Oxidation of melanin (70 μg/ml) was performed by increasing concentrations of LIP in the presence of veratryl alcohol (1.5 mM) and hydrogen peroxide (700 μM) in 50 mM tartrate buffer at pH 3.5. Error bars represent standard deviations of 3 replicate experiments.

FIGs. 8a-b are color photographs that illustrate visualization of the oxidation of melanin by LIP when used in a cream formulation. Decolorization of melanin is observed after the addition of the activator cream to the LIP cream (Figure 8b) but not in the presence of the LIP cream alone (Figure 8a).

FIGs. 9a-b are color photographs that illustrate the effect of LIP cream on skin whitening. Shown is a photograph of a woman's hand taken one week following the application of LIP (twice daily) in a cream formulation. The area treated with LIP (Figure 9a, circled in black) is much lighter than the rest of the skin in the hand (Figure 9b).

FIG. 10 is a color photograph that illustrates the effect of LIP on hair bleaching *in vivo*. A woman's hair was soaked for 1 hr in 50 mM carbonate buffer at pH 11.5. The hair was pre-incubated for 10 seconds with 25 U of LIP and immersed for 1 hr in tartarate buffer at pH 3.5 with veratryl alcohol (1.5 mM) and hydrogen peroxide (8.8 mM). A significant lightening effect was observed in the hair treated with LIP (Figure 10, right tube) as compared with the hair treated with the same solution without LIP (Figure 10, left tube).

FIGs. 11a-b are color photographs of the right forearm of study subject No. 1 illustrating the effect of the LIP whitening cream on skin pigmentation. Figure 11a – a photograph taken at day 0; Figure 11b – a photograph taken at day 21.

FIGs. 12a-c are bar graphs that illustrate the effect of LIP or Hydroquinone creams on skin whitening in study subject No. 1. The LIP or Hydroquinone creams were applied in the upper parts of the right and left forearms while the lower parts remained untreated. The degree of skin pigmentation was measured in both forearms in intervals of 7 days using the Derma Spectrometer. Figure 12a – application of LIP cream; Figure 12b – application of Hydroquinone cream; blue columns = upper part of the right forearm treated with the LIP cream; light blue columns = untreated lower part of right forearm; pink columns = upper part of the left forearm treated with Hydroquinone; white columns = untreated lower part of the left forearm; Figure 12c is

a line graph comparing the decrease in skin pigmentation in the upper forearms following 21 days of treatment using the LIP cream (Figure 12c, blue line) or the Hydroquinone cream (Figure 12c, pink line). Note the sharp decrease in skin pigmentation following 21 days of treatment using the LIP cream as compared with the moderate decrease using the Hydroquinone cream.

FIGs. 13a-b are color photographs of the right forearm of study subject No. 10 illustrating the effect of the LIP whitening cream on skin pigmentation. Figure 13a – a photograph taken at day 0; Figure 13b – a photograph taken at day 21.

FIGs. 14a-c are bar graphs that illustrate the effect of LIP or Hydroquinone creams on skin whitening in study subject No. 10. The LIP or Hydroquinone creams were applied in the upper parts of the right and left forearms while the lower parts remained untreated. The degree of skin pigmentation was measured in both forearms in intervals of 7 days using the Derma Spectrometer. Figure 14a – application of LIP cream; Figure 14b – application of Hydroquinone cream; blue columns = upper part of the right forearm treated with the LIP cream; light blue columns = untreated lower part of right forearm; pink columns = upper part of the left forearm treated with Hydroquinone; white columns = untreated lower part of the left forearm; Figure 14c is a line graph comparing the decrease in skin pigmentation in the upper forearms following 21 days of treatment using the LIP cream (Figure 14c, blue line) or the Hydroquinone cream (Figure 14c, pink line). Note the sharp decrease in skin pigmentation following 21 days of treatment using the LIP cream as compared with the moderate decrease using the Hydroquinone cream.

FIGs. 15a-b are line graphs illustrating the average effect of the LIP and Hydroquinone creams on skin whitening in all 12 study subjects. Figure 15a - the average pigmentation scores; Figure 15b – the average decrease in pigmentation as a fraction of the initial pigmentation score.